## AMENDMENTS TO THE CLAIMS

1-15 (Canceled)

16. (New) Sensor arrangement for the collection of stroke data for a movable element, in particular by an actuator movable through a control member, said arrangement comprising an active coil (18.1) located a distance from at least one passive coil (26.1, 26.2) exhibiting coil arrangement (18); having a current supply (30); and a signal collector (29); and an axially movable rod-shaped sensor part (17) preferably formed from a magnetizable material, said rod-shaped sensor part axially moving back and forth the movable control member in connection therewith between end positions and having a long axis ending in a trailing edge (23.1, 23.2); wherein a short-circuit element (23, 23.0) is provided that is formed from an electrical-conductive material having a small Ohmic resistance, said short-circuit element extending so as to limit the direction of motion as defined by at least one of the given stroke-height (h) defined end position (I, II), and a trailing edge (23.1, 23.2, 23.3) wherein at least a short-circuit element (23) is enclosed by the active coil (18.1) and another trailing edge (23.1, 23.2, 23.3) of at least a short-circuit element (23, 23.0) is at least partly covered by at least one passive coil (26.1, 26.2) and the passive coil is activated upon reaching one of the end positions of a linear movement producing measuring signal.

17. (New) The sensor arrangement according to claim 16, characterized by the trailing edge of the short-circuit element interfaces with a switch at an end of the active coil, wherein another end of the short-circuit element is the passive coil.

18. (New) The sensor arrangement of claim 16, characterized by the rod shaped sensor part (17) having two marks in each case by trailing edges (23.1, 23.2) to limit the short circuit (23, 23.0) distance to between the two marks and such that the distance of each of two course-turned ends is limited to between two coils (18.1, 26.1) and the distance of the each other course-turned trailing edges (23.1, 23.2) of short-circuit elements (23, 23.0) is also limited to the given stroke-height (h) defined end position (I, II) of the sensor element (17) one of the trailing edges (23.1, 23.2, 23.3) of the short-circuit elements (23, 23.0) is enclosed by the active coil (18.1) and the other trailing edge (23.1, 23.2, 23.3) of at least the short-circuit element (23, 23.0) is at least partly covered by the at least one passive coil (26.1, 26.2).

19. (New) The sensor arrangement according to claim 16, characterized by the active coil (18.1) having a longer length than the passive coil (26.1, 26.2) in the direction of the motion of the sensor part of (17).

20. (New) The sensor arrangement of claim 16 characterized by an arrangement of one passive coil (26.1, 26.2) positioned beneath the active coil (18.1) and the distance of the each other course-turned trailing edges (23.1, 23.2) of the two short-circuit elements (23, 23.0) is limited the distance extending between the two short-circuit elements (23, 23.0) to the given stroke-height (h) defined end position (I, II) of the trailing one of the short-circuit elements (23, 23.0) and is enclosed by the active coil (18.1) and one of the two short-circuit element (23, 23.0) is at least partly covered by the at least one passive coil (26.1, 26.2).

21. (New) The sensor arrangement according to claim 20, characterized by, the two passive coils (26.1, 26.2) being electrically connected one behind the other to form a quarter frequency carrier bridge (29).

22. (New) The sensor arrangement according to claim 16, characterized by, at least the active coil (18.1) is purposefully mass unbalance wound.

23. (New) The sensor arrangement according to claim 16, characterized by, the active coil (18.1) has an active coil length and the short-circuit element (23) has a short-circuit element length that is longer than the length of the active coil (18.1).

24. (New) The sensor arrangement according to claim 16, characterized by, the active coil (18.1) has a length that is longer than a measurable for the stroke-height (h).

25. (New) The sensor arrangement according to claim 16, characterized by, an inductivity of the active coil (18.1) is the sum of the inductivities of the passive coils (26.1, 26.2).

26. (New) The sensor arrangement according to claim 16, characterized by, the short-circuit elements (23, 23.0) have a wall thickness that at least in part compensates for a temperature change influence on the sensor arrangement.

27. (New) The sensor arrangement according to claim 16, characterized by the active coil (18.1) and the least a passive coils (26.1, 26.2) are connected in a half bridge and effect range of the sensor part of (17), such that the active coil receives the stroke-height (h) limiting end position (I, II).

28. (New) The sensor arrangement according to claim 16, characterized by, the current supply and signal collector form a carry frequency measuring bridge (29), whereby the active coil (18.1) and the passive coils (26.1, 26.2) form a part of the measuring bridge (29) for the coil arrangement (18).

29. (New) A procedure for the collection stroke data for a movable element, in particular a control member movable by an actuator, wherein by a field variable is established between two coils bounding stroke length, a short-circuit element on a rod-shaped sensor part in an active coil at the part moves between the two coils and induces a signal generation, the short-circuit element is bounded by a given stroke-height defined end position such that the short-circuit element has a range within the two coils and a trailing edge of the short-circuit element travels into a passive coil, and when another trailing edge of a short-circuit element crosses an end of the active coil a linear measuring signal is produced.

30. (New) The procedure according to claim 29, characterized by on the rod-shaped sensor part is bound by two short-circuit element trailing edges that define the stroke-height wherein one of the trailing edges of a short-circuit element is enclosed by the active coil and a further edge one of the two short-circuit elements is at least partly covered by the passive coil.